

FOOD PREFERENCES OF MUTE AND TRUMPETER SWANS

Adrienne J. Froelich, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, 46556

Joe C. Johnson, Kellogg Biological Station Bird Sanctuary, 12685 East C Avenue, Hickory Corners, MI, 49060

David M. Lodge, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, 46556

ABSTRACT

As part of a larger study of herbivory in freshwater systems, the food preferences of Trumpeter Swans (*Cygnus buccinator*) and Mute Swans (*C. olor*) were examined. We performed selective feeding assays with subadult swans at the Kellogg Biological Station Bird Sanctuary in an attempt to determine food preferences, amount of overlap between the two swan species, and plant characteristics which influence feeding preference. Several species of submerged and floating-leaved aquatic vegetation collected from a Michigan lake were tested. Both species of swan showed distinct preferences for and against some plant species. Results showed that there are both similarities and differences in feeding preferences of Mute Swans and Trumpeter Swans. More research is needed to address the extent of overlap between the two species. Theories of plant defense indicate that, while palatability varies among plant species, it can also vary within the same species of plant. To test one of these theories, we collected *Ceratophyllum demersum* from two lakes of differing light availability and trophic status. Trumpeter Swans showed a significant preference for *Ceratophyllum* grown under low light levels over that grown in a high light environment. Thus, preferences for a species of macrophyte may vary depending on the environmental conditions of its habitat.
